

Serial No. 10/085,421

**IN THE CLAIMS:**

---

1. (Amended) An exhaust gas measurement system comprising:

a probe defining a sample exhaust gas passageway for collecting exhaust gas;

a stainless steel canister fluidly connected to said probe for storing the exhaust gas;

a pump fluidly interconnected between said probe and said canister for transferring the exhaust gas from said probe to said canister;

a pressure mass flow controller fluidly interconnected between said probe and said canister producing a exhaust gas flow measurement corresponding to the flow of the exhaust gas from said probe to said canister;

a temperature sensor for sensing a temperature of the exhaust gas proximate to said pressure mass flow controller, said temperature sensor correcting said exhaust gas flow measurement based upon said temperature;

a pressure sensor for sensing a pressure of the exhaust gas proximate to said pressure mass flow controller, said pressure sensor correcting said exhaust gas flow measurement based upon said pressure; and

a heating device heating said stainless steel canister and said pressure mass flow controller.

---